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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,986	04/13/2004	Rolf Bruck	E-80366	5321

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EXAMINER	
PHAM, MINH CHAU THI	

ART UNIT	PAPER NUMBER
1724	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/823,986	BRUCK, ROLF	
	Examiner	Art Unit	
	Minh-Chau T. Pham	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breuer et al (5,322,672), in view of Wickland (6,355,078 B1), and further in view of Li (6,413,589 B1).

Breuer et al discloses a honeycomb filter for a diesel internal combustion engine having layers of metal foil sheets forming a stack with a plurality of channels through which a fluid can flow, wherein the metal sheets have a thickness of about 0.03 to 0.12 mm or about 0.03 to 0.06 mm (Abstract, col. 2, lines 33-35 and lines 58-60), and the covering layers are brazed (col. 3, lines 62-65). Claims 1-33 differ from the disclosure of Breuer et al in that the filter has one covering layer formed from at least partially porous material. Wickland discloses a filter assembly through which a fluid can flow comprising at least one filter layer (52), at least one covering layer (46, 48) formed from at least partially porous material (60, 62), and at least one covering layer (46, 48) having at least one boundary region forming a sleeve surrounding the filter layer and captively holding at least one filter layer inside at least one covering layer (see Fig. 3), and the covering layer being connected to itself by technical joining in at least one boundary region (Fig. 3, col. 3, lines 10-19 and lines 31-42). Wickland also discloses a process for producing a filter assembly through which a fluid can flow comprising the steps of providing at least one covering layer (46, 48) having at least one boundary region formed with porosity (60, 62), placing one filter layer (52) on the at least one covering

layer, forming a sleeve with the at least one covering layer surrounding the at least one filter layer, and forming a connection by technical joining at the at least one boundary region, captively fixing the at least filter layer within the at least one covering layer (Fig. 3, col. 3, lines 10-19 and lines 31-42). Li discloses a method of coating a ceramic honeycomb and bonding ceramic onto a substrate which is elongated reinforced fibers or sheets (col. 12, line 26) for practical uses over 630 degrees C (Abstract, col. 1, lines 60-62, col. 5, lines 49-52, col. 6, lines 31-42). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the covering layer as taught by Wickland and coating of filter substrate material as taught by Li in order to provide an improved filter apparatus which can be used in a diesel internal combustion engine to effectively purify or clean an exhaust gas stream from the engine. As to the numerical requirements of claims 6-14, 17 and 18, the specification contains no disclosure of either the critical nature of these requirements or any unexpected results arising therefrom, and as such these requirements would be arbitrary and therefore obvious. Applicant **must** show that these requirements are critical. *In re Woodruff, 16 USPQ 2d 1934.*

Response to Amendment

Applicant's arguments filed on September 19, 2005 have been fully considered but they are not persuasive.

Applicant argues that "the filter medium disclosed by Wickland is not capable of withstanding temperatures of over 200 degrees C and cannot withstand the conditions

in the exhaust system of internal combustion engines", as claimed in the newly amended independent claim 1. The Examiner now introduces the Breuer et al as the primary reference in the 103 rejections to show a honeycomb filter for a diesel internal combustion engine having layers of metal foil sheets forming a stack with a plurality of channels through which a fluid can flow, wherein the metal sheets have a thickness of about 0.03 to 0.12 mm or about 0.03 to 0.06 mm (Abstract, col. 2, lines 33-35 and lines 58-60), and the covering layers are brazed (col. 3, lines 62-65). The Examiner reintroduces Wickland as the secondary reference in combination with the Breuer et al reference in the 103 rejections to show a filter assembly through which a fluid can flow comprising at least one filter layer (52), at least one covering layer (46, 48) formed from at least partially porous material (60, 62), and at least one covering layer (46, 48) having at least one boundary region forming a sleeve surrounding the filter layer and captively holding at least one filter layer inside at least one covering layer (see Fig. 3), and the covering layer being connected to itself by technical joining in at least one boundary region (Fig. 3, col. 3, lines 10-19 and lines 31-42). Wickland also discloses a process for producing a filter assembly through which a fluid can flow comprising the steps of providing at least one covering layer (46, 48) having at least one boundary region formed with porosity (60, 62), placing one filter layer (52) on the at least one covering layer, forming a sleeve with the at least one covering layer surrounding the at least one filter layer, and forming a connection by technical joining at the at least one boundary region, captively fixing the at least filter layer within the at least one covering layer (Fig. 3, col. 3, lines 10-19 and lines 31-42). The Examiner newly introduces Li as the tertiary

reference in combination with Breuer et al and Wickland to show a method of coating a ceramic honeycomb and bonding ceramic onto a substrate which is elongated reinforced fibers or sheets (col. 12, line 26) for practical uses over 630 degrees C (Abstract, col. 1, lines 60-62, col. 5, lines 49-52, col. 6, lines 31-42), as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the covering layer as taught by Wickland and coating of filter substrate material as taught by Li in order to provide an improved filter apparatus which can be used in a diesel internal combustion engine to effectively purify or clean an exhaust gas stream from the engine.

Regarding to the newly amended limitation in independent claim 1 "said fiber layer and said covering layer being resistant to temperatures of over 200 degrees C", it is well known in the art that filter used in a diesel internal combustion engine can withstand temperatures over 200 degrees C, so this limitation is for intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham, 2 USPQ 2d 1647 (1987)*. The tertiary reference Li discloses a method of coating a ceramic honeycomb and bonding ceramic onto a substrate which is elongated reinforced fibers or sheets (col. 12, line 26) for practical uses over 630 degrees C (Abstract, col. 1, lines 60-62, col. 5, lines 49-52, col. 6, lines 31-42), so that any filter apparatus for use in diesel combustion engine can be coated on the filter substrate for practical uses over 630 degree C, as claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh-Chau Pham
Patent Examiner
Art Unit: 1724
November 14, 2005